

### **REMARKS**

Claims 2, 7, 8, 19, 20 and 28 to 70 are canceled without prejudice to filing in a continuing application. Claims 15 to 18, 27 and 93 to 96 are presently withdrawn, as being directed to unelected species. Claims 1, 6, 11 to 13 and 24 to 26 have been amended. Claims 71 to 96 have been added. Thus, claims 1, 3 to 6, 9 to 18, 21 to 27 and 71 to 96 are currently pending.

Claim 1 has been amended to include the limitations of canceled claim 2 and the limitation of the crosslinker being the polycarboxylic acid of claim 12. Claim 6 has been amended to depend directly on claim 1, from which it had previously indirectly depended. Claims 11 to 13 and 24 to 26 have been amended in view of the amendment to claim 1.

New claim 74 is the same scope as original claim 6. New claim 78 is the same scope as original claim 1, but with the ricinoleic acid component renamed a fatty acid component and narrowed to exclude ricinoleic acid and the crosslinker being the polycarboxylic acid, polycarbonate or combination thereof of claim 12. New claim 83 is the same scope as original claim 12, but with the crosslinker being the polycarbonate of claim 12. New claim 87 is directed to a binder consisting essentially of a ricinoleic acid component, an epoxidized vegetable oil and a crosslinker.

New claim 71 narrows the scope of claim 6 by selecting the preferred member of the Markush group. New claims 72, 81, 85 and 91 are the same scope as claim 6, but depend on claims 13, 78, 83 and 87, respectively. New claims 73, 75, 82, 86 and 92 narrow the scope of claims 72, 74, 81, 85 and 91 by selecting the preferred member of the

Markush group. New claims 76, 79 and 89 are of the same scope as claim 13, but depend on claim 74, 78 and 87, respectively. New claims 77, 80, 84 and 90 are of the same scope as amended claim 11, but depend on claims 74, 78, 83 and 87, respectively. New claim 88 is the same scope as original claim 12, but depends on claim 87.

Since claims 1, 3 to 6, 9 to 14 and 21 to 26 are members of elected Group I, new claims 71 to 92 are also part of elected Group I. Since claims 15 to 18 and 27 are presently withdrawn, as being directed to unelected species, claims 93 to 96 are likewise presently withdrawn. Claims 15 to 18, 27 and 93 to 96 should be examined upon allowance of generic claim 1, from which they directly or indirectly depend.

Claim 2 was rejected in paragraph 1 on page 2 of the Office Action mailed January 31, 2006, ("the latest Office Action") under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Attorney for Applicants wishes to thank the Examiner for noting the clerical error. Claim 2 has been incorporated into claim 1 with the epoxidized vegetable oil being substituted for the epoxy containing compound.

In paragraph 2 on page 3 of the latest Office Action, claims 1 to 6, 9 to 11, 21, 22 and 26 have been rejected as being anticipated by Japanese Patent No. 5-132616 ("Japanese '616"). The Examiner indicated that more favorable consideration would be given if the crosslinker were limited to those listed in claim 12. The limitation of the crosslinker being a polycarboxylic acid of claim 12 has been included in claim 1. This feature is not taught or suggested by Japanese '616. Therefore, claim 1 and the claims dependent thereon are allowable over Japanese '616.

The free radical generating catalysts required by claims 6, 23, 72, 74, 81, 85 and 91 are not taught or suggested by Japanese '616. Therefore, claims 6, 23, 72, 74, 81, 85 and 91 are allowable over Japanese '616.

Claims 1, 3 to 6, 11 to 14, 21, 22, 24 and 25 have been rejected in paragraph 3 on page 3 of the latest Office Action as being anticipated by Romanian Patent No. 111,782. Since the epoxidized vegetable oil limitation of claim 2 has been included in claim 1, claim 1 and the claims dependent thereon are allowable over the Romanian patent.

The free radical generating catalysts required by claims 6, 23, 72, 74, 81, 85 and 91 are not taught or suggested by the Romanian patent. Therefore, claims 6, 23, 72, 74, 81, 85 and 91 are allowable over the Romanian patent.

Claim 13, as well as claims 76, 79 and 89, requires the polycarboxylic acid to be sebacic acid, citric acid or both. The Romanian patent does not teach or suggest these acids. Therefore, claim 13, 76, 79 and 89 are allowable over the Romanian patent.

In paragraph 4 on page 3 of the latest Office Action, claims 1, 3 to 6, 12, 13, 21, 22 and 24 have been rejected as being anticipated by CAPLUS accession no. 1987:34138 for the article by Lavrega. Again, since the epoxidized vegetable oil limitation of claim 2 has been included in claim 1, claim 1 and the claims dependent thereon are allowable over the Lavrega article.

The free radical generating catalysts required by claims 6, 23, 72, 74, 81, 85 and 91 are not taught or suggested by the Lavrega article. Therefore, claims 6, 23, 72, 74, 81, 85 and 91 are allowable over the Lavrega article.

Claim 13, as well as claims 76, 79 and 89, requires the polycarboxylic acid to be sebacic acid, citric acid or both. The article by Lavrega does not teach or suggest these acids. Therefore, claim 13, 76, 79 and 89 are allowable over the article by Lavrega.

Claims 1, 3 to 6, 11 to 14, 21, 22, 24 and 25 have been rejected in paragraph 5 on page 4 of the latest Office Action as being anticipated by Soviet Union Patent No. 1,479,474. Since the epoxidized vegetable oil limitation of claim 2 has been included in claim 1, claim 1 and the claims dependent thereon are allowable over the Soviet Union patent.

The free radical generating catalysts required by claims 6, 23, 72, 74, 81, 85 and 91 are not taught or suggested by the Soviet Union Patent. Therefore, claims 6, 23, 72, 74, 81, 85 and 91 are allowable over the Soviet Union patent.

Claim 13, as well as claims 76, 79 and 89, requires the polycarboxylic acid to be sebacic acid, citric acid or both. The Soviet Union Patent does not teach or suggest these acids. Therefore, claim 13, 76, 79 and 89 are allowable over the Soviet Union patent.

In paragraphs 6 and 7 on page 4 of the latest Office Action, claims 1, 3, 11, 21 and 22 have been rejected as being anticipated by German Patent No. 1,804,364 or CAPLUS accession no. 1989:595992 for the article by Cuadrado et al. Again, since the epoxidized vegetable oil limitation of claim 2 has been included in claim 1, claim 1 and the claims dependent thereon are allowable over the German patent and the Cuadrado et al. article.

Claims 1, 12 to 14, 21, 22, 24 and 25 have been rejected in paragraph 8 on page 4 of the latest Office Action as being anticipated by May US Patent No. 2,921,040

("May"). Since the epoxidized vegetable oil limitation of claim 2 has been included in claim 1, claim 1 and the claims dependent thereon are allowable over May.

Claim 13, as well as claims 76, 79 and 89, requires the polycarboxylic acid to be sebacic acid, citric acid or both. May does not teach or suggest these acids. Therefore, claim 13, 76, 79 and 89 are allowable over May.

In paragraph 9 on page 5 of the latest Office Action, claims 1, 3 to 6, 9, 21 and 22 have been rejected as being anticipated by Czechoslovakian Patent No. 90264. Again, since the epoxidized vegetable oil limitation of claim 2 has been included in claim 1, claim 1 and the claims dependent thereon are allowable over the Czechoslovakian patent.

The free radical generating catalysts required by claims 6, 23, 72, 74, 81, 85 and 91 are not taught or suggested by the Czechoslovakian patent. Therefore, claims 6, 23, 72, 74, 81, 85 and 91 are allowable over Czechoslovakian patent.

In paragraph 10 on page 5 of the latest Office Action, claims 1, 3 to 6, 11 and 21 have been rejected as being anticipated by Japanese Patent No. 55-129416 ("Japanese '416"). Again, since the epoxidized vegetable oil limitation of claim 2 has been included in claim 1, claim 1 and the claims dependent thereon are allowable over Japanese '416.

The free radical generating catalysts required by claims 6, 23, 72, 74, 81, 85 and 91 are not taught or suggested by Japanese '416. Therefore, claims 6, 23, 72, 74, 81, 85 and 91 are allowable over Japanese '416.

Claims 1 to 6, 11 to 14, 21 to 24 and 26 have been rejected in paragraph 11 on page 6 of the latest Office Action as being obvious over Graham et al. U.S. Patent No. 3,510,489 ("Graham"). Graham does not teach or suggest a polycarboxylic acid

crosslinker as required by amended claim 1. Therefore, claim 1 and the claims dependent thereon are allowable over Graham.

In paragraph 12 on page 6 of the latest Office Action, the Examiner states that “[a]lthough the claimed castor oil is not exemplified together with the epoxidized soybean oil, it would have been obvious to employ a particular plasticizer such as the epoxidized soybean oil with a certain wetting agent such as castor oil in order to optimize the dispersion of the ferromagnetic material,” referring to column 3, lines 26 to 29.

Graham teaches that the epoxidized soybean oil is a heat stabilizer and not a plasticizer. See column 5, lines 56 to 58. Column 3, lines 36 to 29, teaches that “plasticizers, wetting agents and stabilizers [can be added] to maintain good dispersion of the magnetic material.” There is no teaching or suggestion that a heat stabilizer will maintain good dispersion. Therefore, there is no teaching or suggestion that the epoxidized soybean oil would maintain good dispersion and no suggestion to combine the epoxidized soybean oil with the sprayable magnetic formulation in Example II (column 7, lines 3 to 51).

Since there are no magnetic particles in the Substrate Slurry, Mixture D, there is no suggestion to add the castor oil wetting agent to Mixture D (column 5, lines 20 to 43). As stated by the Court of Appeals for the Federal Circuit in In re Kotzab, 217 F.3d 1365, 1369-1370 (2000):

“Most if not all inventions arise from a combination of old elements. Thus, every element of a claimed invention may often be found in the prior art. However, identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific

combination that was made by the applicant. Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference."

(Citations omitted.) Absent a suggestion to combine the epoxidized soybean oil and castor oil, claim 1 and new claims 74, 78 and 83 must be allowed over Graham.

Claim 13, as well as claims 76, 79 and 89, requires the polycarboxylic acid to be sebacic acid, citric acid or both. Graham does not teach or suggest these acids. Therefore, claim 13, 76, 79 and 89 are allowable over Graham.

In summary, none of the references teach or suggest the combination of the polycarboxylic acid, the epoxidized vegetable oil and ricinoleic acid component of claim 1. Therefore, claim 1 and the claims dependent thereon are allowable.

None of the cited references teach or suggest the free radical generating catalyst required by claim 74, except Graham. Graham does not teach or suggest the combination of a ricinoleic acid component and epoxy group-containing component. Therefore, claim 74 is allowable over the cited art.

None of the cited references teach or suggest the polycarboxylic acid or polyacrylate crosslinker of claim 78, except Graham, which does not teach or suggest the combination of a ricinoleic acid component and epoxy group-containing component, and the Japanese '416 patent. While the Japanese '416 patent does teach a polycarboxylic acid being formed from the polycarboxylic anhydride in the formula on page 12 of the Japanese patent, claim 78 limits the fatty acid component by deleting ricinoleic acid. The Japanese '416 patent teaches a fatty acid containing ricinoleic acid and castor oil fatty acid. It does not teach the use of castor oil or an estolide. See the DERWENT-ACC- NO

1980-83412C, which states that the composition comprises a polyfunctional epoxy compound, an aliphatic polycarboxylic anhydride and a fatty acid.

The last two lines in the PAT-NO JP355129416A translation of “100 parts of fatty acid containing more than 50wt% of ricinoleic acid as the major component such as castor oil” is obviously incorrect. Castor oil is not an example of ricinoleic acid. It is apparent that the “castor oil” should modify “fatty acid” so that the sentence would read “100 parts of castor oil fatty acid containing more than 50wt% of ricinoleic acid as the major component.” A castor oil fatty acid is a fatty acid derived from castor oil, not the castor oil itself. Therefore, the Japanese ‘416 patent does not teach or suggest the composition of claim 78, including castor oil or an estolide, and claim 78 is allowable over the cited art.

Claim 83 requires a polyacrylate crosslinker. None of the cited references teach or suggest a polyacrylate crosslinker. Therefore, claim 83 is allowable over the cited art.

Claim 87 is directed to a binder consisting essentially of a ricinoleic acid component, an epoxidized vegetable oil and a crosslinker. None of the cited references teaches or suggests an epoxidized vegetable oil, except Japanese patent ‘616 and Graham. The ‘616 patent requires a polyoxyalkylene polymer containing reactive silicon groups and Graham requires a polyvinyl chloride, both of which are excluded by claim 87. Therefore, claim 87 is allowable over the cited art.

Since generic independent claim 1 is allowable, claims 15 to 18, 27 and 93 to 96 should be examined. Attorney for Applicants submits that all the claims remaining in the application are in a condition for allowance. Therefore, early consideration and allowance are respectfully requested.

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Respectfully submitted,

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Date

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